



# CITEL

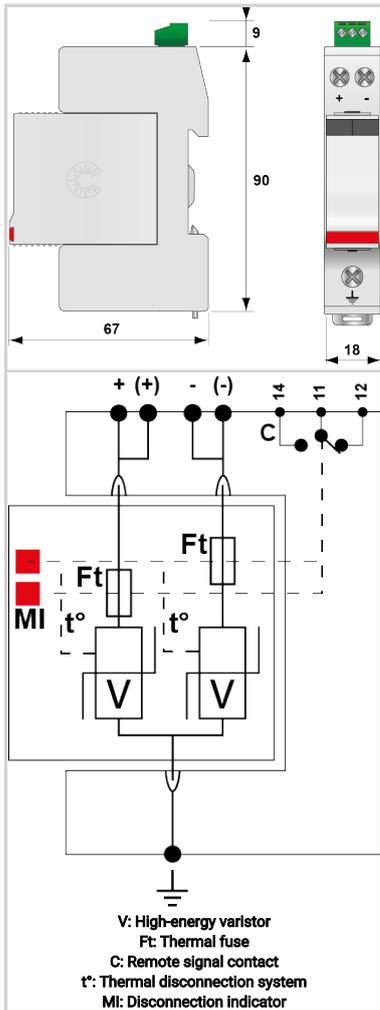
## DC power surge protector - 12 Vdc

### DS220S-12DC



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- DC power surge protector
- 24 Vdc
- Compact design
- I<sub>max</sub> : 20 kA
- Pluggable module
- Remote signaling
- Very low U<sub>p</sub> protection level



#### Electrical Characteristics

|                                    |                        |                        |
|------------------------------------|------------------------|------------------------|
| SPD type                           | IEC                    | 2                      |
| Network                            |                        | DC or PV network 12Vdc |
| Nominal line voltage               | Un                     | 48 Vdc                 |
| Nominal DC voltage                 | Un-dc                  | 12 Vdc                 |
| Nominal PV voltage                 | Uocstc                 | 12 Vdc                 |
| Max. AC operating voltage          | Uc                     | 20 Vac                 |
| Max. PV operating voltage          | Ucpv                   | 24 Vdc                 |
| Max. DC operating voltage          | Uc                     | 24 Vdc                 |
| Max. load current @25°C            | IL                     | 50 A                   |
| Residual Current                   | Ipe                    | < 0.2 mA               |
| PV Permanent Operating current     | Icpv                   | < 0.1 mA               |
| Leakage current to Ground          |                        |                        |
| Current consumption at Ucpv        |                        |                        |
| Follow current                     | If                     | None                   |
| Nominal discharge current          | In                     | 10 kA                  |
| 15 x 8/20 μs impulses              |                        |                        |
| Max. discharge current             | I <sub>max</sub>       | 20 kA                  |
| max. withstand @ 8/20 μs by pole   |                        |                        |
| Total Maximum discharge current    | I <sub>max</sub> Total | 40 kA                  |
| max. total withstand @ 8/20 μs     |                        |                        |
| Current withstand short circuit PV | Iscpv                  | 1000 A                 |
| Connection mode(s)                 |                        | +/-/PE                 |
| Protection mode(s)                 |                        | Common mode            |

#### Mechanical Characteristics

|                                   |    |  |
|-----------------------------------|----|--|
| Technology                        |    | MOV  |
| SPD configuration                 |    | 2-poles  |
| Connection to Network             |    | By screw terminals: 1.5-10mm <sup>2</sup> (actives wires) and 2.5-25mm <sup>2</sup> (ground) |
| Format                            |    | Plug-in modular box  |
| Mounting                          |    | Symmetrical rail 35 mm (EN 60715)  |
| Housing material                  |    | Thermoplastic UL94 V-0   |
| Operating temperature             | Tu | -40/+85°C  |
| Protection rating                 |    | IP20   |
| Failsafe mode                     |    | Disconnection from DC network  |
| Disconnection indicator           |    | 2 mechanical indicators  |
| Spare module(s)                   |    | DSM220-12DC  |
| Remote signaling of disconnection |    | Output on changeover contact   |
| Dimensions                        |    | See diagram  |
| Weight                            |    | 0.111 kg   |

#### Disconnectors

|                           |  |                     |
|---------------------------|--|---------------------|
| Thermal disconnector      |  | Internal            |
| Back-up protection device |  | Fuses type gG - 20A |

#### Standards

|                      |  |  |
|----------------------|--|--|
| Standards compliance |  | IEC 61643-11 / EN 61643-11 / UL1449 ed.5 |
|----------------------|--|--|



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**DS220S-12DC**

|                    |       |
|--------------------|-------|
| Certification      | cRUus |
| <b>Part number</b> |       |
| <b>390111</b>      |       |

